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Letter to the Editor

RE: “Low back pain misdiagnosis or missed diagnosis: Core principles” (Monie AP, Fazey PJ, Singer KP. Manual Therapy 22 (2016) 68–71)

Monie et al. (2016) highlighted the importance of following guidelines in low back pain (LBP) management. In agreement, we reinforce that screening for relevant pathology is integral to clinical assessment. Where serious pathology or progressive neurological deficits are present, cross-referral and diagnostic imaging is essential (Dagenais et al., 2010).

Using two cases, the authors assert the importance of the biomedical LBP care-model while critiquing multidimensional approaches, suggesting they disregard traditional examination processes, rendering them susceptible to “missed diagnoses”. The illustrated cases raise four clinical conundrums relevant to physiotherapy practice:

1. Limitations of clinical tests to make patho-anatomical diagnosis

The article proposes clinical tests to identify ‘fundamental patho-anatomical sources of pain’. However, evidence supporting the validity of these tests is lacking, limiting their usefulness in guiding treatment (Hancock et al., 2007).

2. Limitations of MRI to predict pain and to direct care pathways

Patho-anatomical abnormalities are common in asymptomatic individuals, become more prevalent with age and poorly predict future LBP (Steffens et al., 2014; Jarvik et al., 2005). Further, anatomical nerve compression may be less important than inflammatory-induced sensitization in sciatica pain (Deyo, 2013; Andrade et al., 2011). Evidence also suggests imaging adds little to LBP management and in fact can increase risk of disability, chronicity (Karel et al., 2015; Chou et al., 2009) and invasive interventions (Deyo et al., 2015).

3. Limitations of biomedical interventions for pain

Systematic reviews demonstrate that interventions such as spinal injections and surgery have no greater long-term benefit over conservative interventions, while carrying additional risks

(Mannion et al., 2016; Atkinson and Zacest, 2016; Lurie, 2014; Harris and Buchbinder, 2013; Balague et al., 2012).

4. Mediators of clinical outcome

Changes in outcomes achieved by interventions are influenced by, patient and therapist expectations (Hush et al., 2011), therapeutic-alliance (Ferreira et al., 2013), and pain cognitions (Mannion et al., 2012). This highlights that change likely results from a complex interaction of factors, and it is often not mediated by the factors directly targeted by the intervention (Testa and Rossetini, 2016). Further, positive outcomes do not necessarily validate the intervention.

Integrative approaches recognise the important role of the ‘bio’ in the assessment and management of LBP. This involves: diagnostic triage, psychosocial risk assessment, targeted education and functional rehabilitation while discouraging unwarranted radiology (O’Sullivan and Lin, 2014; NICE, 2009). There is evidence that these approaches are more effective in reducing the disability and financial burden of LBP (Vibe Fersum et al., 2013; Hill et al., 2011) over traditional physiotherapy and manual therapy approaches.

The Physiotherapy profession is at a challenging juncture (Jull and Moore, 2012), where physiotherapists feel unskilled in integrating ‘bio’ and ‘psychosocial’ factors to effectively manage LBP (Singla et al., 2015; Synnott et al., 2015; Hill et al., 2011). While some perceive this as a crisis, others identify an opportunity for professional growth (Nielsen et al., 2014; O’Sullivan, 2012). Clearly further work is required to bridge this ‘bio’ – ‘psychosocial’ gap within a broader understanding of neuroscience and the current evidence (Synnott et al., 2016).

Conflict of interest

None declared.

Ethical approval

Not required.

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